

IN THE UNITED STATES PATENT & TRADEMARK OFFICE	
IN RE APPLICATION OF: SENN ET AL.	
APPLICATION NO.: 10/801,405	
Filed: March 16, 2004	Group Art Unit: 1616
For: Pesticidal Compositions	Examiner: PRYOR, ALTON M.
Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450	

DECLARATION UNDER RULE 132

I, Leslie Fuquay, a citizen of the United States, residing in Chapel Hill, NC USA, hereby declare:

CREDENTIALS**My Experience**

- **R&D Scientist II** – Syngenta Crop Protection, Inc., Biological R&D Data Management Greensboro, NC,
 - (2000-present)
- **Regional Data Coordinator** – Zeneca Ag Products, Inc., Eastern Reg. Tech. Ctr, Whitakers, NC
 - (1997-2000)
- **Weed Science Research Assistant** – North Carolina State University, Raleigh, NC
 - (Jun 1993 - Dec 1995)
- **Research Specialist, Weed Science and Agronomy** – VPI&SU Tidewater Agric. Exp. Stn, Suffolk, VA
 - (Oct 1988-Apr 1993)
- **Agricultural Research Technician** – USDA-ARS, Tidewater Agric. Exp. Stn, Suffolk, VA
 - (Jan 1988-Oct 1988)
- **Plant Pathology Lab Aid** – VPI&SU Tidewater Agric. Exp. Stn, Suffolk, VA
 - (Jun 1986-Nov 1987)
- **Woodlands Research Technician** – Union Camp Corporation, Franklin, VA
 - (Apr 1985-Oct 1985)

My Education, Training & Certification

- **North Carolina State University – M.S. Crop Science** (major: weed science, minor: statistics); conferred May 1995
 - *Honors*: Phi Kappa Phi; First Place Award, 1995 Southern Weed Science Society Graduate Student Paper Contest
- **North Carolina State University – B.S. Forestry** (concentration: biometry); conferred December 1984
 - *Honors*: Dean's list, Senior Honors Research Project and Seminar, Xi Sigma Pi Forestry Honor Fraternity, Gamma Sigma Delta Agriculture Honor Fraternity, Southwest Forest Industries Scholarship
- Six Sigma Executive Overview, Aug 2004 (SAS Institute)
- JMP Scripting Workshop, Jun 2005 (SAS Institute)
- SAS JMP Software: Design and Analysis of Experiments, Nov 17-18, 2003 (SAS Institute, Cary, NC)
- SAS JMP Software: ANOVA and Regression, Aug 7-8, 2003 (SAS Institute, Cary, NC)
- SAS JMP Software: Statistical Data Exploration, Aug 6, 2003 (SAS Institute, Cary, NC)
- SAS Statistics II: ANOVA and Regression, Oct 27-29, 2003 (SAS Institute, Rockville, MD)
- SAS Statistics I: Introduction to ANOVA, Jun 27-28, 2002 (SAS Institute, Cary, NC)
- SAS Programming I, Jun 4-5, 2002 (SAS Institute, Cary, NC)

TABLE 2E- Larvicidal Activity in <i>Mutella sylvestris</i>									
Thiamethoxam	Abamectin	Found	Expected	Factor (F/E)	Mean No. of Live Insects	Abbott Corrected Mortality	Abbott Adjusted Mortality	Abbott Corrected Expected	Corrected Factor (F/E)
(conc. in ppm)	(conc. in ppm)								
0.002875	--	17	--	--	83	5.7	5.7	--	--
0.00575	--	12	--	--	88	0.0	0.0	--	--
0.0115	--	13	--	--	87	1.1	1.1	--	--
0.023	--	15	--	--	85	3.4	3.4	--	--
0.046	--	12	--	--	88	0.0	0.0	--	--
0.092	--	15	--	--	85	3.4	3.4	--	--
0.185	--	22	--	--	78	11.4	11.4	--	--
0.37	--	10	--	--	90	-2.3	0.0	--	--
0.74	--	35	--	--	65	26.1	26.1	--	--
1.48	--	57	--	--	43	51.1	51.1	--	--
2.96	--	82	--	--	18	79.5	79.5	--	--
5.92	--	20	--	--	80	9.1	9.1	--	--
11.84	--	10	--	--	90	-2.3	0.0	--	--
23.68	--	10	--	--	90	-2.3	0.0	--	--
47.36	--	8	--	--	92	-4.5	0.0	--	--
94.72	--	33	--	--	67	23.9	23.9	--	--
189.44	--	72	--	--	28	68.2	68.2	--	--
378.88	--	100	--	--	0	100.0	100.0	--	--
757.76	--	100	--	--	0	100.0	100.0	--	--
1515.52	--	100	--	--	0	100.0	100.0	--	--
3031.04	--	25	33.6	0.74	75	14.8	14.8	14	1.04
6062.08	--	22	25.3	0.87	78	11.4	11.4	6	2.00
12124.16	--	15	25.3	0.59	85	3.4	3.4	6	0.60
24248.32	--	18	20.8	0.87	82	6.8	6.8	0	#DIV/0!
48496.64	--	20	20.8	0.96	80	9.1	9.1	0	#DIV/0!
96993.28	--	15	19.04	0.79	85	3.4	3.4	0	#DIV/0!
193986.56	--	28	21.7	1.29	72	18.2	18.2	1	16.00
387973.12	--	45	19.96	2.25	55	37.5	37.5	1	33.00
775946.24	--	60	41.71	1.44	40	54.5	54.5	25	2.21
1551892.48	--	95	75.64	1.26	5	94.3	94.3	69	1.38
3103784.96	--	40	21.8	1.83	60	31.8	31.8	3	9.33
6207569.92	--	60	43.05	1.39	40	54.5	54.5	26	2.06
12415139.84	--	85	76.2	1.12	15	83.0	83.0	69	1.20
24830279.68	--	100	100	1	0	100.0	100.0	100	1.00
49660559.36	--	43	41.04	1.05	57	35.2	35.2	24	1.48
99321118.72	--	92	75.36	1.22	8	90.9	90.9	68	1.33
198642237.44	--	100	100	1	0	100.0	100.0	100	1.00
397284474.88	--	92	76.2	1.21	8	90.9	90.9	69	1.31
794568949.76	--	98	100	0.98	2	97.7	97.7	100	0.98
1589137899.52	--	12	--	--	88	--	--	--	--
3178275799.04	--	12	--	--	88	--	--	--	--
6356551598.08	--	12	--	--	88	--	--	--	--
12713103196.16	--	12	--	--	88	--	--	--	--
25426206392.32	--	12	--	--	88	--	--	--	--
50852412784.64	--	12	--	--	88	--	--	--	--
101704825569.28	--	12	--	--	88	--	--	--	--
203409651138.56	--	12	--	--	88	--	--	--	--
406819302277.12	--	12	--	--	88	--	--	--	--
813638604554.24	--	12	--	--	88	--	--	--	--
1627277209108.48	--	12	--	--	88	--	--	--	--
3254554418216.96	--	12	--	--	88	--	--	--	--
6509108836433.92	--	12	--	--	88	--	--	--	--
13018217672867.84	--	12	--	--	88	--	--	--	--
26036435345735.68	--	12	--	--	88	--	--	--	--
52072870691471.36	--	12	--	--	88	--	--	--	--
104145741382942.72	--	12	--	--	88	--	--	--	--
208291482765885.44	--	12	--	--	88	--	--	--	--
416582965531770.88	--	12	--	--	88	--	--	--	--
833165931063541.76	--	12	--	--	88	--	--	--	--
1666331862127083.52	--	12	--	--	88	--	--	--	--
3332663724254167.04	--	12	--	--	88	--	--	--	--
6665327448508334.08	--	12	--	--	88	--	--	--	--
13330654897016668.16	--	12	--	--	88	--	--	--	--
26661309794033336.32	--	12	--	--	88	--	--	--	--
53322619588066672.64	--	12	--	--	88	--	--	--	--
106645239176133345.28	--	12	--	--	88	--	--	--	--
213290478352266690.56	--	12	--	--	88	--	--	--	--
426580956704533381.12	--	12	--	--	88	--	--	--	--
853161913409066762.24	--	12	--	--	88	--	--	--	--
1706323826818133524.48	--	12	--	--	88	--	--	--	--
3412647653636267048.96	--	12	--	--	88	--	--	--	--
6825295307272534097.92	--	12	--	--	88	--	--	--	--
13650590614545068195.84	--	12	--	--	88	--	--	--	--
27301181229090136391.68	--	12	--	--	88	--	--	--	--
54602362458180272783.36	--	12	--	--	88	--	--	--	--
109204724916360545566.72	--	12	--	--	88	--	--	--	--
218409449832721091133.44	--	12	--	--	88	--	--	--	--
436818899665442182266.88	--	12	--	--	88	--	--	--	--
873637799330884364533.76	--	12	--	--	88	--	--	--	--
1747275598661768729067.52	--	12	--	--	88	--	--	--	--
3494551197323537458135.04	--	12	--	--	88	--	--	--	--
6989102394647074916270.08	--	12	--	--	88	--	--	--	--
13978204789294149832540.16	--	12	--	--	88	--	--	--	--
27956409578588299665080.32	--	12	--	--	88	--	--	--	--
55912819157176599330160.64	--	12	--	--	88	--	--	--	--
111825638314353198660321.28	--	12	--	--	88	--	--	--	--
223651276628706397320642.56	--	12	--	--	88	--	--	--	--
4473025532574127946412849.12	--	12	--	--	88	--	--	--	--
8946051065148555892825698.24	--	12	--	--	88	--	--	--	--
178921021302971117856513996.48	--	12	--	--	88	--	--	--	--
357842042605942235713027992.96	--	12	--	--	88	--	--	--	--
715684085211884471426605985.92	--	12	--	--	88	--	--	--	--
1431368170423768942853211971.84	--	12	--	--	88	--	--	--	--
2862736340847537885706423943.68	--	12	--	--	88	--	--	--	--
57254726816950757714128528867.36	--	12	--	--	88	--	--	--	--
114509453633901515428257057734.72	--	12	--	--	88	--	--	--	--
229018907267803030856514114468.44	--	12	--	--	88	--	--	--	--
45803781453560606171222828229688.88	--	12	--	--	88	--	--	--	--
916075629071212122444444444444.76	--	12	--	--	88	--	--	--	--
1832151258142424444444444444.52	--	12	--	--	88	--	--	--	--
3664302516284848888888888888.28	--	12	--	--	88	--	--	--	--
7328605032569697777777777777.04	--	12	--	--	88	--	--	--	--
1465721006513839555555555555.80	--	12	--	--	88	--	--	--	--
2931442013027679111111111111.56	--	12	--	--	88	--	--	--	--
5862884026055358222222222222.32	--	12	--	--	88	--	--	--	--
1172576805211071644444444444.08	--	12	--	--	88	--	--	--	--
2345153610422142888888888888.84	--	12	--	--	88	--	--	--	--
4690307220844285777777777777.60	--	12	--	--	88	--	--	--	--
9380614441688571555555555555.36	--	12	--	--	88	--	--	--	--
1876122883377714111111111111.12	--	12	--	--	88	--	--	--	--
3752245766755428222222222222.88	--	12	--	--	88	--	--	--	--
7504491533510856444444444444.64	--	12	--	--	88	--	--	--	--
1500898067002171288888888888.40	--	12	--	--	88	--	--	--	--
3001796134004342577777777777.16	--	12	--	--	88	--	--	--	--
6003592268008685155555555555.92	--	12	--	--	88	--	--	--	--
1200718533601737022222222222.68	--	12	--	--	88	--	--	--	--
2401437067203474044444444444.44	--	12	--	--	88	--	--	--	--
4802874134406948088888888888.20	--	12	--	--	88	--	--	--	--
9605748268813896177777777777.96	--	12	--	--	88	--	--	--	--
1921149653762779235555555555.72	--	12	--	--	88	--	--	--	--
3842299307525558471111111111.48	--	12	--	--	88	--	--	--	--
7684598615051116942222222222.24	--	12	--	--	88	--	--	--	--
1536919223010233884444444444.00	--	12	--	--	88	--	--	--	--
3073838446020467768888888888.76	--	12	--	--	88	--	--	--	--
6147676892040935537777777777.52	--	12	--	--	88	--	--	--	--
1229535378408187107555555555.28	--	12	--	--	88	--	--	--	--
2459070756816354151111111111.04	--	12	--	--	88	--	--	--	--
4918141513632708302222222222.80	--	12	--	--	88	--	--	--	--
9836283027265416044444444444.56	--	12	--	--	88	--	--	--	--
1967256605531083208888888888.32	--	12	--	--	88	--	--	--	--
3934513211062166417777777777.08	--	12	--	--	88	--	--	--	--
7869026422124332835555555555.84	--	12	--	--	88	--	--	--	--
15738052844248665671111111111.60	--	12	--	--	88	--	--	--	--
3147610568849733134222222222.36	--	12	--	--	88	--	--	--	--
6295221137699466268444444444.12	--	12	--	--	88	--	--	--	--
1259044227391892536888888888.88	--	12	--	--	88	--	--	--	--
2518088454783785073777777777.64	--	12	--	--	88	--	--	--	--
5036176909567570147555555555.40	--	12	--	--	88	--	--	--	--
10072353819135140951111111111.16	--	12	--	--	88	--	--	--	--
2014470763827028190222222222.92	--	12	--	--	88	--	--	--	--
4028941527654056380444444444.68	--	12	--	--	88	--	--	--	--
8057883055308112760888888888.44	--	12	--	--	88	--			

PROCEDURES

1. That the following calculations were carried out under my supervision to calculate the corrected mortality of Table 2c from the Declaration of Elke Hillesheim, filed June 9, 2008 using Abbott's Control Correction Formula.
2. I understand Abbott's Control Correction Formula to be commonly used and scientifically accepted as a formula to adjust for mortality of animal pests not associated with an animal pest treatment, such as the natural mortality in an untreated control group, or mortality occurring from a blank spray used as a check.

3. RESULTS OF ABBOTT'S CONTROL CORRECTION FORMULA TO TABLE 2C

Table 2c gives the percentage mortality of the mixtures (Found), the Abbott Corrected Mortality, the Abbott Adjusted Mortality (where negative numbers are adjusted to zero), together with the Corrected Expected Mortality (using Abbott's Adjusted Mortality in the Colby Function).

Abbott's Control Correction Formula

$$\% \text{ Corrected Mortality} = 100 \times \left(1 - \frac{n \text{ in } T \text{ after treatment}}{n \text{ in } C \text{ after treatment}} \right)$$

n = insect population

T = treated

C = control

Colby Function (Expected Values)

$$E = (A + B) - \frac{A \times B}{100}$$

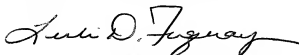
A = % protection of compound 1

B = % protection of compound 2

Table 2c: Percent Mortality on *Plutella xylostella*, 2nd instars, when exposed to various mixtures of Abamectin and Thiamethoxam

FINAL STATEMENT

I, Leslie Fuquay, declare further that all statements made herein of personal knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

A handwritten signature in cursive script, appearing to read "Leslie D. Fuquay".

Signed this 27th day of February 2009